South Florida Water Management District **EAA Reservoir A-1 Basis of Design Report**

January 2006

APPENDIX 9-6 – GMS GROUNDWATER MODELS

DVD(s) are included with the following additional GMS groundwater models for evaluation of seepage from Reservoir A-1 submitted on October 13, 2005:

- 1. existing.gpr Baseline, existing conditions (pre-reservoir) model run
- 2. alt#1_res12ft.gpr Post-reservoir model run. Reservoir depth 12 ft, continuous embankment cross-section and setbacks used along entire reservoir (not including design incorporating STA-3/4 Supply Canal Perimeter Levee), cutoff wall depth 34 ft, seepage canal depth 13.5 ft with canal levels held at 10 ft deep
- 3. alt#1_res8-8ft.gpr Post-reservoir model run. Reservoir depth 8.8 ft (average depth from WBM output), continuous embankment cross-section and setbacks used along entire reservoir (not including design incorporating STA-3/4 Supply Canal Perimeter Levee), cutoff wall depth 34 ft, seepage canal depth 13.5 ft with canal levels held at 10 ft deep
- 4. alt#2_res12ft.gpr Post-reservoir model run. Reservoir depth 12 ft, cutoff wall depth 34 ft along northwest, north, and east reservoir boundaries and 10 ft along the STA-3/4 Supply Canal, seepage canal depth 10 ft along northwest, north, and east reservoir boundaries and no seepage canal along the STA-3/4 Supply Canal
- 5. alt#2_res8-8ft.gpr Post-reservoir model run. Reservoir depth 8-8 ft (average depth from WBM output), cutoff wall depth 34 ft along northwest, north, and east reservoir boundaries and 10 ft along the STA-3/4 Supply Canal, seepage canal depth 10 ft along northwest, north, and east reservoir boundaries and no seepage canal along the STA-3/4 Supply Canal
- 6. alt#3_res12ft.gpr Post-reservoir model run. Reservoir depth 12 ft, cutoff wall depth 34 ft along northwest, north, and east reservoir boundaries and 10 ft along the STA-3/4 Supply Canal, seepage canal depth 13.5 ft along northwest, north, and east reservoir boundaries with canal level held at 10 ft deep and no seepage canal along the STA-3/4 Supply Canal
- 7. alt#3_res8-8ft.gpr Post-reservoir model run. Reservoir depth 8-8 ft (average depth from WBM output), cutoff wall depth 34 ft along northwest, north, and east reservoir boundaries and 10 ft along the STA-3/4 Supply Canal, seepage canal depth 13.5 ft along northwest, north, and east reservoir boundaries with canal level held at 10 ft deep and no seepage canal along the STA-3/4 Supply Canal
- 8. wells_refined_existing2.gpr Baseline wells alternative, Pre-reservoir model run with 550 100-ft deep wells spaced 100 ft apart, pumping into a 10-ft deep seepage canal

- 9. wells_refined_future2.gpr Post-reservoir model run. Reservoir depth 12 ft, 550 100-ft deep wells spaced 100 ft apart, pumping into a 10-ft deep seepage canal
- 10. wells_refined_future2_8-8ft.gpr Post-reservoir model run. Reservoir depth 8.8 ft (average depth from WBM output), 550 100-ft deep wells spaced 100 ft apart, pumping into a 10-ft deep seepage canal

DVD(s) are included with the following GMS groundwater models for evaluation of seepage from Reservoir A-1 originally submitted on July 29, 2005:

- 1. baseline.gpr Baseline, existing conditions (pre-reservoir) model run
- 2. scenario1.gpr Post-reservoir model run. Reservoir depth 1 ft, cutoff wall depth 34 ft, seepage canal depth 10 ft.
- 3. scenario2.gpr Post-reservoir model run. Reservoir depth 1 ft, cutoff wall depth 34 ft, seepage canal depth 20 ft.
- 4. scenario3.gpr Post-reservoir model run. Reservoir depth 1 ft, cutoff wall depth 69 ft, seepage canal depth 10 ft.
- 5. scenario4.gpr Post-reservoir model run. Reservoir depth 1 ft, cutoff wall depth 69 ft, seepage canal depth 20 ft.
- 6. scenario5.gpr Post-reservoir model run. Reservoir depth 3 ft, cutoff wall depth 34 ft, seepage canal depth 10 ft.
- 7. scenario6.gpr Post-reservoir model run. Reservoir depth 3 ft, cutoff wall depth 34 ft, seepage canal depth 20 ft.
- 8. scenario7.gpr Post-reservoir model run. Reservoir depth 3 ft, cutoff wall depth 69 ft, seepage canal depth 10 ft.
- 9. scenario8.gpr Post-reservoir model run. Reservoir depth 3 ft, cutoff wall depth 69 ft, seepage canal depth 20 ft.
- 10. scenario9.gpr Post-reservoir model run. Reservoir depth 6 ft, cutoff wall depth 34 ft, seepage canal depth 10 ft.
- 11. scenario10.gpr Post-reservoir model run. Reservoir depth 6 ft, cutoff wall depth 34 ft, seepage canal depth 20 ft.
- 12. scenario11.gpr Post-reservoir model run. Reservoir depth 6 ft, cutoff wall depth 69 ft, seepage canal depth 10 ft.
- 13. scenario12.gpr Post-reservoir model run. Reservoir depth 6 ft, cutoff wall depth 69 ft, seepage canal depth 20 ft.
- 14. scenario13.gpr Post-reservoir model run. Reservoir depth 12 ft, cutoff wall depth 34 ft, seepage canal depth 10 ft.
- 15. scenario14.gpr Post-reservoir model run. Reservoir depth 12 ft, cutoff wall depth 34 ft, seepage canal depth 20 ft.
- 16. scenario15.gpr Post-reservoir model run. Reservoir depth 12 ft, cutoff wall depth 69 ft, seepage canal depth 10 ft.

- 17. scenario16.gpr Post-reservoir model run. Reservoir depth 12 ft, cutoff wall depth 69 ft, seepage canal depth 20 ft.
- 18. scenario17.gpr Post-reservoir model run. Reservoir depth 15 ft, cutoff wall depth 34 ft, seepage canal depth 10 ft.
- 19. scenario18.gpr Post-reservoir model run. Reservoir depth 15 ft, cutoff wall depth 34 ft, seepage canal depth 20 ft.
- 20. scenario19.gpr Post-reservoir model run. Reservoir depth 15 ft, cutoff wall depth 69 ft, seepage canal depth 10 ft.
- 21. scenario20.gpr Post-reservoir model run. Reservoir depth 15 ft, cutoff wall depth 69 ft, seepage canal depth 20 ft.
- 22. scenario21.gpr Post-reservoir model run. Reservoir depth 18 ft, cutoff wall depth 34 ft, seepage canal depth 10 ft.
- 23. scenario22.gpr Post-reservoir model run. Reservoir depth 18 ft, cutoff wall depth 34 ft, seepage canal depth 20 ft.
- 24. scenario23.gpr Post-reservoir model run. Reservoir depth 18 ft, cutoff wall depth 69 ft, seepage canal depth 10 ft.
- 25. scenario24.gpr Post-reservoir model run. Reservoir depth 18 ft, cutoff wall depth 69 ft, seepage canal depth 20 ft.